

VIA FEDEX

Eric F. Pastor  
Pastor, Behling & Wheeler, LLC  
2201 Double Creek Drive, Suite 4004  
Round Rock, TX 78664

Re: Gulfco Marine Maintenance Superfund Site, Freeport, Texas  
Unilateral Administrative Order, CERCLA Docket No. 06-05-05A  
Draft Remedial Alternatives Memorandum

Dear Mr. Pastor,

The Environmental Protection Agency (EPA) and the Texas Commission on Environmental Quality (TCEQ) have performed a review of the above referenced document dated December 17, 2010. The enclosed comments shall be incorporated in the Final Remedial Alternatives Memorandum and copies provided to the notification list within fifteen (15) days of receipt of this letter.

If you have any questions, please contact me at (214) 665-8318, or send an e-mail message to [miller.garyg@epa.gov](mailto:miller.garyg@epa.gov).

Sincerely yours,

Gary Miller, P.E.  
Remediation Project Manager

Enclosure

cc: Luda Voskov (TCEQ)

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## Comments

### Draft Remedial Alternatives Memorandum (Memo), dated December 17, 2010

1. (Section 1.2.1, p. 2): The Memo states that restrictive covenants have been filed for all parcels at the site, and provides copies of the restrictive covenants filed for Lots 55, 56, and 57. The Memo shall include copies of the restrictive covenants for all of the parcels at the site. In addition, documentation confirming that the covenants have been deed recorded shall be provided.
2. (Section 1.2.3, p. 6): The Memo states that the extent of contamination potentially includes the area immediately adjacent to the site in off-site Lot 20. The Nature and Extent Data Report (PBW, May 20, 2009) stated that several chemicals were identified in Lot 20 at the edge of a dry dock facility associated with a former commercial marina. These chemicals were at significantly higher concentrations than observed in adjacent site samples, which suggested an off-site contaminant source. The Memo shall include this information regarding Lot 20 with supporting information including a description of Lot 20 sampling results compared to site sampling results, description of shallow soil sampling results, potential for migration from the Gulfco site based on a consideration of the sampling results, etc.
3. (Section 1.2.3, p. 6): The Memo states that the vertical extent of chemicals of interest at concentrations above the evaluation criteria is limited to depths less than four feet. The recent soil samples collected during the tank removal found chemicals of interest exceeding the criteria at a depth of 4 ½ feet. The Memo shall be revised to include this information.
4. (Section 1.2.3): The memo shall include a description of the stained soil that is located below the former above ground storage tanks. This description shall include the type and thickness of overlying material, the depth range of the stained area, the contaminants and concentrations present at levels above the screening levels, and an assessment of any risks. A recommendation shall be made regarding the need for any further action regarding this stained soil area.
5. (Section 1.2.3): The memo shall include a description of the debris pile area that is located adjacent to the southern end of the former impoundments. This description shall include the type and thickness of overlying material, the depth of the contaminants, the contaminants and concentrations present at levels above the screening levels, and an assessment of any risks. A recommendation shall be made regarding the need for any further action regarding this debris pile area.

6. (Section 1.2.4, p. 8): The Memo states that a detailed contaminant fate and transport discussion will be provided in the future Remedial Investigation (RI) Report, and that key considerations from that discussion are included in the Memorandum. The Memo shall also state that the approved RI Report will provide the ultimate results regarding the nature and extent of contamination at the site, and any findings from the approved RI Report that are not consistent with statements in this Memo will be addressed as appropriate in the Feasibility Study for the site.
7. (Section 1.2.5, p. 11): Several site areas discussed in the Memo were not included in the Baseline Ecological Risk Assessment (BERA) as explained in the Final BERA Problem Formulation and Final BERA Work Plan and Sampling and Analysis Plan. Those areas shall be summarized in the Memo, including a summary of why they were not included in the BERA.
8. (Section 1.2.5, p. 12): The Memo discusses ecological risks for the site. Because an approved Baseline Ecological Risk Assessment (BERA), which is not final at this time, will be the ultimate determination of ecological risks at the site, a statement shall be included that the approved BERA will determine the actual ecological risks for the site, and any BERA findings that are not consistent with statements in this Memo will be addressed as appropriate in the Feasibility Study for the site. In addition, the last sentence of the next to the last paragraph on page 12, which begins with “Accordingly and consistent with discussions ...” shall be deleted.
9. (Section 2, p. 13 and others): The Memorandum included text regarding the former surface impoundments and their consideration for development of remedial action objectives, general response actions, technology identification and screening, and development of alternatives. The former surface impoundments were closed in 1982 in accordance with a state approved closure plan. The Human Health Risk Assessment completed in 2010 determined that there are no unacceptable cancer risks or non-cancer hazard indices at the impoundments. There are risks resulting from ground water at the site as addressed elsewhere in the Memo. During the Remedial Investigation the cap thickness was found to range from 2.5-feet to greater than 3.5-feet and had ruts in the cap. The state approved closure plan required that the cap be 3-feet thick. Maintaining the cap at the required thickness is important to minimize the potential for infiltration through the cap. Because the cap does not currently meet the thickness requirements defined within the state approved closure plan, the Memo shall be revised to provide for the repair of the cap to meet those approved closure requirements as part of an operation and maintenance program for the site, including regular inspections and repairs as necessary in the future. The text in the Memo regarding remedial action objectives, general response actions, technology

identification and screening, presumptive remedies, and development of alternatives for the cap shall be removed and replaced with text to the effect that the cap will be repaired to meet the requirements of the approved state closure plan. Further, the Memo shall state that where possible, the use of heavy equipment in marsh areas shall be limited to avoid causing harm to un-impacted sediment habitat.

10. (Section 2): Compliance with the Migratory Bird Treaty Act (MBTA) was not identified as a requirement for the site. The MBTA prohibits the intentional and unintentional taking of migratory birds, including their nests and eggs, except as permitted by the U.S. Fish and Wildlife Service. Compliance with the MBTA shall be included as a requirement for work at the site. Any grading and clearing of brush from the cap during the nesting season (usually April 1 – July 15), shall be proceeded by a survey conducted by a qualified biologist. The survey shall investigate the vegetation growing on the cap for nests. If active nests are identified they shall be avoided until the young have fledged or the nests have been abandoned.
11. (Section 2.2, p. 13): The Memo states that it is anticipated that the remedial action objectives for the site will not be based on ecological endpoints given the lack of potential risk to these receptors. Because an approved BERA, which is not final at this time, will be the ultimate determination of ecological risks at the site, a statement shall be included that the approved BERA will determine the actual ecological risks for the site, and any BERA findings that are not consistent with statements in this Memo will be addressed as appropriate in the Feasibility Study for the site.
12. (Section 2.2.2, p. 15): The Memo states that there are no complete exposure pathways for ecological receptors. The Memo shall be revised to state that there are no “currently” complete exposure pathways for ecological receptors.
13. (Section 3.1, p. 22): Alternatives 2 and 3 include fencing around the capped area, but the description does not provide for warning signs. Signs warning of the presence and potential danger of hazardous materials posted at regular intervals around the capped area shall be included as a part of these alternatives.
14. (Table 3): For the UV Process Option under the General Response Action of on-site treatment of collected ground water, the Memo states that the process has moderate capital and moderate operation and maintenance costs, which is similar to other process options considered, but then eliminates the technology because it has higher overall costs than the other physical technologies. The memo shall clarify why the UV Process Option is considered to have higher overall costs.
15. (Table 3): For the in-situ treatment response actions, the effectiveness will be impacted by the heterogeneity of the geology in the area. For heterogeneous

geologies, the injected materials are less effective in contacting the contamination, which results in less effective treatments. The Memo shall be revised to consider site heterogeneity in the effectiveness evaluation for these response actions.

16. (Table 3): The preliminary site investigation results indicate that active biodegradation in the ground water may be occurring at the site. This discussion is included in the draft Remedial Investigation Report, which is currently under review. The impact on naturally occurring biodegradation from the in-situ chemical treatment process shall be considered under the effectiveness discussion for the in-situ chemical treatment.
17. (Table 3): Natural biodegradation is not listed in the screening of ground water remediation technologies. This shall be added to the table and screened with the other technologies, and considered for inclusion in the remedial action alternatives.
18. (Figure 5): This figure includes the Zone A monitoring wells, but not the Zone B or Zone C wells. Figure 5 shall be revised, or a new figure added, to show the locations of the Zone B and Zone C monitoring wells.
19. (Appendix A, Section A.2): The citation for the Texas waste classification rules is given as “30 TAC Subchapter R.” The citation shall be changed to “30 TAC 335 Subchapter R.”
20. (Appendix A, Section A.2): The second paragraph of this section refers to the Texas Risk Reduction Program protective concentration levels as “to be considered” guidelines. The reference to “to be considered” shall be removed and replaced with “criteria.”